



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 21 2014

REPLY TO THE ATTENTION OF:
E-19J

Ms. Catherine Batey
Division Administrator
Federal Highway Administration, Illinois Division
3250 Executive Park Drive
Springfield, Illinois 62703

Ms. Sherry Phillips
Illinois Department of Transportation
400 W. Wabash Avenue
Effingham, Illinois 62401

**RE: Draft Environmental Impact Statement for the United States Highway 51
(Pana to Centralia) Transportation Project in Illinois – CEQ No. 20140053**

Dear Ms. Batey and Ms. Phillips:

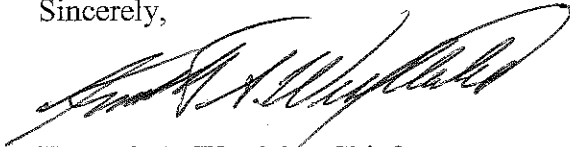
The U.S. Environmental Protection Agency (EPA) has received the Illinois Department of Transportation's (IDOT) and the Federal Highway Administration's (FHWA) Draft Environmental Impact Statement (DEIS) dated March 5, 2014 for the U.S. 51 transportation project which crosses several communities in south central Illinois. These comments are provided pursuant to our authorities under the National Environmental Policy Act (NEPA), Council of Environmental Quality NEPA Implementing Regulations (40 CFR 1500-1508), and Section 309 of the Clean Air Act.

The proposed project involves the improvement of the transportation facility and connectivity within the project's south central Illinois region and to enhance the highway system continuity. Connectivity and continuity are significant issues that can be addressed by this project. The project will also promote the economic development goals and address the safety concerns of the local communities in the project area. The DEIS analyzed impacts associated with 11 build alternatives as well as the "No Action" alternative.

EPA has rated the DEIS and each of its 11 build alternatives as having "**Environmental Concerns (EC-2).**" This rating was assigned because the proposed alternatives have impacts that should be avoided to fully protect the environment. The DEIS does not contain sufficient information for EPA to fully assess the project's environmental impacts. that should be avoided in order to fully protect the environment. Our concerns about the 11 build alternatives include impacts to wetlands, streams and upland habitat. Under the merger process for NEPA and Section 404 of the Clean Water Act, EPA will participate in discussions associated with identifying a preferred alternative. A summary of our rating system, *Summary of Rating Definitions and Follow Up Action*, is enclosed. Also enclosed are EPA's detailed comments on the DEIS. We look forward to continued discussions with your agencies and the other natural resource agencies to address EPA's detailed comments in the Final EIS.

We look to the Final EIS and Record of Decision (ROD) to commit to incorporating all mitigation measures mentioned in the DEIS into project design and construction. EPA is available to discuss these comments to the DEIS at your convenience. Please feel free to contact Robert O'Brien of my staff at 312-886-3283 or by e-mail at Obrien.robert@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenneth A. Westlake", written over a horizontal line.

Kenneth A. Westlake, Chief
NEPA Implementation Section
Office of Enforcement and Compliance Assurance

Encl: Summary of Rating Definitions and Follow Up Action
U.S. Highway 51 Project Detailed Comments

Cc: Janis Piland, FHWA- Illinois Division
Keith McMullen, Corps of Engineers-St. Louis District
Matthew Mangan, U.S. Fish and Wildlife Service
Steve Hamer, Illinois Department of Natural Resources
Terry Savko, Illinois Department of Agriculture

U.S. Highway 51 (Pana to Centralia) Draft EIS Project Detailed Comments

Wetlands/Streams

EPA is particularly concerned with the potential for the new road alignment to impact forested wetlands. The forested wetland complex along Fish Lake ditch (wetlands 209, 521, 557, 520, 522, and 524), and the forested wetland complex along Crooked Creek (wetland 342) are both high quality wetlands that are providing habitat benefits to the streams associated with these wetland corridors. The forested wetlands along Crooked Creek are part of a large wooded corridor that is likely to be providing important habitat for forest interior bird and other forest species. The proposed bisection of this forested corridor (wetland 342) would have significant adverse impacts far beyond the direct loss of forested wetland due to fill for the road. Indirect impacts are likely to include alteration of hydrology in the forested wetlands remaining "upstream and downstream" from any road crossing and the fragmentation of forest habitat. Changes in wetland hydrology are likely to degrade or eliminate forested wetland plant communities and habitat fragmentation is likely to result in an influx of invasive species and decrease in the habitat quality of the forested areas remaining along the road corridor. EPA recommends that the road alignment be adjusted to completely avoid forested wetland 348.

The proposed improvements to U.S. 51 also include a number of stream crossings. No mention is made of mitigation for the stream impacts. For all stream crossings, especially new crossings, the principals of natural stream channel design need to be the basis for designing stream crossings. All new stream crossings need to be mitigated for adverse impacts to stream functions resulting from the bridging or enclosing of streams.

In order to comply with the Clean Water Act Section 404(b)(1) guidelines, FHWA and IDOT should recommend an alternative that avoids impacts to wetlands, particularly for the high quality forested wetland complexes. Once impacts to wetlands and streams have been avoided and minimized to the maximum extent possible, the unavoidable impacts need to be mitigated. The mitigation plan should include both stream and wetland mitigation. Indirect wetland impacts need to be mitigated for as well. Restoration of high quality forested wetland is particularly difficult. For this reason EPA strongly recommends avoiding impacts to forested wetlands. If mitigation is needed for forested impacts, EPA recommends that it be done in kind. There is a scarcity of information that is provided in the DEIS regarding type, amount, and location of possible mitigation. A reasonable determination should be made since detailed information on the extent impacts to waters of the U.S. will not be finalized until a final alternative is selected. In order to comply with the federal Mitigation Rule, the mitigation plan should be developed using a watershed approach.

In summary, several of the alternatives currently under consideration will result in significant adverse impacts to several high quality forested wetland/stream complexes. Wetland impacts are projected to range between 39.6 and 57.5 acres of direct wetland impacts depending on the alternatives selected. Forested wetlands are particularly difficult to restore, especially high quality sites, such as the ones mentioned above. EPA recommends that Ramsey Alternative 2 be dropped due to its high level of adverse impacts to forested wetlands/streams.

Floodplains

For the Vandalia alternatives, Alternative 1 has the fewest floodplain impacts. For the Ramsey Creek alternatives, Alternative B has the fewest floodplain impacts. Whatever alternatives are chosen, the FEIS should discuss specific mitigation measures.

Agricultural Resources

For the Vandalia alternatives, Alternative 4 has the fewest impacts regarding the number of acres of affected farmland, number of farms severed, number of uneconomic remnants, and the number of adverse miles travelled. For the Centralia-Sandoval alternatives, Alternative 1 has the fewest impacts with respect to the number of affected farms, number of farms severed, and the number of uneconomic remnants. Whatever alternative is chosen, the FEIS should discuss specific mitigation measures.

The Land Evaluation and Site Assessment (LESA) scores for each alternative should be included in the Final EIS by IDOT and FHWA.

Vegetation and Land Cover

For the Ramsey Creek alternatives, Alternative B impacts less forest and savanna area than Alternative A. Whatever alternative is chosen, the Final EIS should discuss specific mitigation measures.

For the Ramsey alternatives, Alternative 1 impacts less forested area than Alternative 2. As previously mentioned, EPA recommends that Alternative 2 be dropped. The FEIS should discuss specific mitigation measures for upland habitat impacts.

Threatened and Endangered Species

Regarding potential impacts to the Indiana Bat, the following alternatives have fewer predicted impacts: Centralia-Sandoval Alternative 2, Vandalia Alternative 4, and Ramsey Alternative 2. The FEIS should include documentation of FHWA and IDOT consultation with the U.S. Fish and Wildlife Service (USFWS) under the Endangered Species Act (ESA). Any mitigation measures that emerge from that consultation should be committed in the FEIS and Record of Decision (ROD).

The FEIS and ROD should reflect discussions with USFWS regarding the protection of the Northern Long-Eared Bat. Discussions with the Illinois Department of Natural Resources to protect state-listed species should also be captured in the FEIS and ROD. Correspondence with these agencies should be included in Appendices to the FEIS.

Wildlife Crossings

EPA commends IDOT and FHWA for the utilization of culverts for smaller waterway crossings and by the enhancement of wildlife movement by the employment of culverts with a natural bottom. IDOT and FHWA plans to accomplish this by using a three-sided box culvert or installing a typical a typical four-sided box culvert below the substrate of the waterway. Where feasible, we recommend preserving additional space above the normal high water mark under culverts and bridges to accommodate passage of terrestrial wildlife.

All build alternatives plan to impact riparian crossings to some extent. Whatever the preferred alternative, IDOT and FHWA should develop specific mitigation measures in the FEIS and ROD to minimize these impacts to the wildlife resources in the project area.

Natural Areas

Vandalia Alternatives 1, 3, and 4 lie outside the buffer portion of the Vandalia Geologic Area. Should IDOT and FHWA select Vandalia Alternative 2 as the preferred alternative, IDOT and FHWA should develop specific mitigation measures in the Final EIS to minimize the impacts to the southeast buffer portion of the Vandalia Geologic Area.

Driveway Access

Vandalia Alternative 4 has the most driveway access issues because of the number of "Residential Other Buildings" affected. EPA recommends IDOT and FHWA consider whether driveway access could potentially increase vehicular travel times and vehicular idling times when selecting a preferred alternative.

Air and Clean Diesel Strategies during Construction

IDOT and FHWA should commit to the following clean diesel strategies during construction activities.

- Using ultra-low sulfur diesel fuel (less than 15 parts per million sulfur).
- Retrofitting engines with an exhaust filtration device to capture diesel particulate matter before it enters the construction sites.
- Positioning the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, thereby reducing the fume concentration to which personnel are exposed.
- Using catalytic converters to reduce carbon monoxide, aldehydes, and hydrocarbons in diesel fumes (these devices must be used with low sulfur fuels).
- Using enclosed, climate-controlled cabs pressurized and equipped with high efficiency particulate air (HEPA) filters to reduce the operator's exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.

Air and Clean Diesel Strategies during Construction (cont.)

- Regularly maintaining diesel engines, which is essential to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance. For example, blue/black smoke indicates that an engine requires servicing or tuning.
- Reducing exposure through work practices and training, such as turning off engines when vehicles are stopped for more than a few minutes, training diesel equipment operators to perform routine inspection, and maintaining filtration devices.
- Purchasing new vehicles that are equipped with the most advanced emissions control systems available.
- Using electric starting aids, such as block heaters, to warm the engines of older equipment and vehicles, thereby reducing diesel emissions.
- Using respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, a N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the work being conducted and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a National Institute of Occupational Safety and Health (NIOSH) approval number. Do not use paper or surgical masks without NIOSH approval number.

Editorial

Some of the figures in the DEIS should be modified in the FEIS.

- In Figure 3.1-2 on page 3-9, the legend is difficult to read.
- In Figure 3.8-1 on page 3-144, it is difficult to discern the color coding between "ponds" and "lakes."
- In Figure 3.9-1 on page 3-169, it is difficult to discern the color coding between "V Alt.1" and "R Alt. 2."
- In Figure 3.10-1 on page 3-178, it is difficult to discern the color coding between "V Alt. 1" and "R Alt. 2."

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION

Environmental Impact of the Action

LO-Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate

The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information

The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

^{*}From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

